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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,737	08/25/2003	Arvind D. Patel	05542/073001	2299
26722	7590	09/12/2008	EXAMINER	
OSHA LIANG/MI			FEELY, MICHAEL J	
ONE HOUSTON CENTER			ART UNIT	
SUITE 2800			PAPER NUMBER	
HOUSTON, TX 77010			1796	
			NOTIFICATION DATE	DELIVERY MODE
			09/12/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/647,737

Applicant(s)

PATEL ET AL.

Examiner

Michael J. Feely

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 20080723
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Pending Claims

Claim 21 is pending.

Response to Arguments

1. Applicant's arguments (*see pages 2-4 of the response*) filed June 16, 2008, with respect to the rejection of claim 21 over Temple et al. (US Pat. No. 6,861,393), have been fully considered and are persuasive. The previous rejection of claim 21 under 35 U.S.C. 102(e) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Temple et al. (US Pat. No. 6,861,393) has been withdrawn.

The reference alone does not provide adequate support for the previous inherency rejection. Furthermore, the MSDS of RM-63™ indicates that the dimer concentration of the fluid ranges from 94-100%. This would leave 6% (at most) of trimers. Applying this low percentage to Temple yields 0.06 lbs per barrel (at most) of trimers, which is below the instantly claimed range of *greater than 0.1 lbs per barrel and up to 5.0 lbs per barrel*. Furthermore, even if one was motivated to adjust this amount to Halliburton's suggested range of 0.25-1.5 lbs per barrel (*see product data sheet*), the upper end of this range would still be below the instantly claimed range.

2. Applicant's arguments (*see pages 5-6 of the response*) filed June 16, 2008 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The teachings of Reddie et al. (*the primary reference*) teach and suggest the instantly claimed range of trimer. Specifically, they disclose the use of purified polymerized fatty acid featuring approximately 12 weight percent of trimers. This purified polymerized fatty acid is provided in an amount of 2.5 to 30 lbs per barrel, yielding a trimer amount of *0.3 to 3.6 lbs per barrel*. Using this type and amount of purified polymerized fatty acid effectively controls the concentration of the trimer, as recited in the claims.

The teachings of Van Slyke (*the supporting reference*) are relied upon to establish that organophillic and non-organophillic clays are functional equivalent viscosifiers for drilling muds, wherein they are both recognized in the art as *conventional viscosifiers*. This supporting reference is not required to satisfy the trimer content in order to be applicable in this prior art combination.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reddie et al. (US Pat. No. 2,994,660) in view of Van Slyke (US Pat. No. 6,017,854).

Regarding claim 21, Reddie et al. disclose: **(21)** a drilling fluid (column 1, lines 9-19) comprising:

(A) an oleaginous fluid (column 1, lines 9-16; column 5, line 16-49), wherein the oleaginous fluid is the continuous phase of the drilling fluid (column 1, lines 9-19) and wherein the oleaginous fluid comprises from about 30% to about 95% by volume of the drilling fluid (column 5, lines 42-46; column 4, lines 50-67) and the oleaginous fluid of a material selected from the group consisting diesel oil, mineral oil, synthetic oil, esters, ethers, acetals, dialkylcarbonates, olefins, and combinations thereof (column 5, lines 16-49);

(B) a non-oleaginous fluid (column 1, lines 9-16; column 4, line 20 through column 5, line 15), wherein the non-oleaginous fluid is the discontinuous phase of the drilling fluid (column 1, lines 9-19), wherein the non-oleaginous fluid comprising from about 1% to about 70% by volume of said drilling fluid (column 4, lines 50-67) and the non-oleaginous fluid is selected from the group consisting of fresh water, sea water, a brine containing organic or inorganic dissolved salts, a liquid containing water-miscible organic compound, and combinations thereof (column 4, line 20 through column 5, line 15);

(C) a clay (column 15, line 37 through column 16, line 15), wherein the clay is present in a concentration of about 0.1% to about to about 6% by weight (column 15, lines 37-55; Example VI);

(D) a primary emulsifier (column 10, line 35 through column 13, line 9), wherein the primary emulsifier is in sufficient concentration to stabilize the invert emulsion (column 12, lines 21-33);

(E) a weighting agent (column 2, lines 35-41; Example VI), wherein the weighting agent or bridging agent is selected from the group consisting of galena, hematite, magnetite, iron

oxides, illumenite, barite, siderite, selstite, dolomite, calcite and combinations thereof (Example VI); and

(F) a rheology modifier (column 5, line 50 through column 10, line 33), wherein the rheology modifier is a mixture of polycarboxylic fatty acids (column 9, lines 34-70), wherein the mixture of polycarboxylic fatty acids is added in sufficient concentration so that the fatty acid concentration in the drilling fluid is greater than 0.1 pounds per barrel and is up to 5.0 pounds per barrel (column 9, lines 34-70).

Reddie et al. disclose the use of both a weighting agent (barite) and a clay (X-811) (*see Example VI*), wherein, "As to the type of clay selected, it should have sufficient absorptive power to permit, with reasonable minimum concentrations of clay, adsorption on the clay of the liquid ingredients of formula (aside from the acid polymer) as well as any moisture collection in the concentrate from the atmosphere," (*see column 15, lines 37-42*). However, they fail to explicitly disclose organophillic clay.

Van Slyke discloses drilling muds featuring similar ingredients (*see column 3, lines 33-65*). They disclose that both organophillic and non-organophillic clays are recognized in the art at conventional viscosifiers for drilling muds (*see column 12, lines 32-46*). This disclosure demonstrates that these materials are recognized as functional equivalents. In light of this, it has been found that combining or substituting equivalents known for the same purpose is *prima facie* obvious - *see MPEP 2144.06*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the clays of Reddie et al. with organophillic clays because the teaching of

Van Slyke demonstrate that these clays are recognized in the art as functional equivalent viscosifiers for drilling muds.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is (571)272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael J Feely/
Primary Examiner, Art Unit 1796

September 9, 2008